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PTO/SB/08A (08-00)

Approved for use through 10/31/2002, OMB 0651-0031

Approved for use through 10/31/2022. GHS-051-003
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<p>Substitute for form 1449A/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p><i>(use as many sheets as necessary)</i></p>				<p>Complete if Known</p> <table border="1"> <tr> <td>Application Number</td> <td>10/685,597</td> </tr> <tr> <td>Filing Date</td> <td>October 16, 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Kong et al.</td> </tr> <tr> <td>Group Art Unit</td> <td>2812</td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Attorney Docket Number</td> <td>5000.129D</td> </tr> </table> <div style="text-align: right; margin-top: -20px;">  <p style="margin: 0;">OCT 16 2003</p> <p style="margin: 0;">U.S. PATENT & TRADEMARK OFFICE</p> </div>		Application Number	10/685,597	Filing Date	October 16, 2003	First Named Inventor	Kong et al.	Group Art Unit	2812	Examiner Name		Attorney Docket Number	5000.129D
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U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
PD	10	WO	99/18617		Cree Research, Inc.	04-15-1999		
↑	11	Japan	9-174494		Nichia Chemical Industries, Inc.	06-30-1997		X
	12	Japan	9-201477		" "	07-28-1997		X
	13	Japan	9-277448		" "	10-09-1997		X
	14	Japan	9-290098		" "	10-22-1997		X
	15	Japan	9-324997		" "	11-26-1997		X
	16	Japan	11-191657		" "	07-13-1999		
↓	17	Japan	07-273367		Mitsubishi Cable Industries, Ltd.	10-20-1995		
PD	18	Japan	9-093315		Nichia Chemical Industries, Inc.	04-11-1997		X

Examiner Signature	PHUC T. DANG	Date Considered	3/12/2005
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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
PD	19	JP	10312971		NEC CORP.	11-24-1998		
↑	20	WO	99/23693	A	Sumitomo Electric Industries Ltd.	05-14-1999		
	21	EP	1041610	A1	Kensaku Motoki	04-2000		
	22	CA	2,258,080	A1	Nichia Chemical Industries, Ltd.	04-09-1998		
	23	WO	98/47170		" "	10-22-1998		
	24	WO	00/31783		North Carolina State University	06-02-2000		
	25	WO	00/33365		" "	06-08-2000		
	26	WO	99/65068		" "	12-16-1999		
↓	27	EP	0 942 459	A1	Nichia Chemical Industries	09-15-1999		
↓	28	EP	1 005 067	A2	Sony Corp. Tokyo	05-31-2000		
PD	29	CN	1258094		Sony Corp	06-28-2000		

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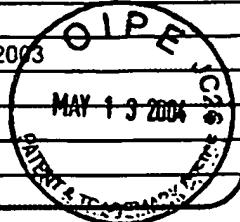
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Group Art Unit	2812
Examiner Name	



Attorney Docket Number

5000.129D

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
PD	30	DAVIS, ET AL., "Pendo epitaxial Growth and Characterization of GaN and Related Materials on 6H-SiC(0001) and Si(111) Substrates", Department of Materials Science and Engineering, North Carolina State University, F99W2.1	
	31	GEHRKE ET AL., "Pendo-Epitaxy of Gallium Nitride and Aluminum Nitride Films and Heterostructures on Silicon Carbide Substrate", MRS Internet Journal Nitride Semiconductor Research 4S1, G3.2, 1999	
	32	KATO, ET AL., "Selective growth of wurtzite GaN and Al _x Ga _{1-x} N on GaN/sapphire substrates by metalorganic vapor phase epitaxy", Journal of Crystal Growth 144, 1994, 133-140	
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	36	NAKAMURA ET AL., "High-Power, Long-Lifetime InGaN/GaN/AlGaN-Based Laser Diodes Grown on Pure GaN Substrates", Japanese Journal of Applied Physics, 1998, Vol. 37, Pt. 2, No. 3B	
	37	NAKAMURA, "InGaN/GaN/AlGaN-based laser diodes", Properties, Processing and Applications of Gallium Nitride and Related Semiconductors C5.1, June 1998, pp. 587-95	
	38	NAKAMURA ET AL., "InGaN/GaN/AlGaN-Based Laser Diodes Grown on GaN Substrates with a Fundamental Transverse Mode", Japanese Journal of Applied Physics, 1998, Vol. 37, Pt. 2, No. 9A/B	
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PD	40	SHEALY ET AL., "Single Step Process for Epitaxial Lateral Overgrowth of GaN", The Heterogeneous Optoelectronics Technology Center: Quarterly Report, p. 9	

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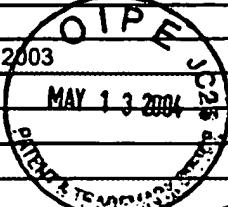
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PD	41	SMART, ET AL., "Single step process for epitaxial lateral overgrowth of GaN on SiC and sapphire substrates", Applied Physics Letters, Vol. 75, No. 24; December 1999, pp. 3820-3822	
↑	42	DUPUIS, R.D. et al., Selective-area and lateral epitaxial overgrowth of III-N materials by metalorganic chemical vapor deposition"; Journal of Crystal Growth, vol. 195, no. 1-4, December 1998 (1998-12), pages 340-345	
	43	KUNG, P. et al., Lateral epitaxial overgrowth of GaN films on sapphire and silicon substrates, Applied Physics Letters, vol. 74, no. 4, Jan. 25, 1999, pages 570-572	
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	47	KIDOGUCHI, I. et al., Improvement of crystalline quality in GaN films by air-bridged lateral epitaxial growth, Japanese Journal of Applied Physics, Part 2 (Letters), vol. 39, no. 58, May 15, 2000, pages L453-L453	
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